

- The non-polar liquid boiled first.

8. Explain how intermolecular attractions affect the boiling point of a substance.

because if they have a stronger attraction then it will be harder to separate them.

9. Explain why polar and non-polar substances won't stay mixed with each other.

because they are not the same type of attraction so they will want to repel each other.

10. Which molecule had the strongest attraction:

- the most polar molecule

11. Explain why polarity has an effect on the strength of attraction between molecules.

because if they have different polarity then they will be stronger because they want to attract each other.

12. Which substance will have the highest boiling point:

- 1,4,7-heptanetriol

13. Explain your choice for highest boiling point:

because it has stronger attractions so it will be more compact and harder to break apart or meltdown.

14. Which molecule pairs had the strongest attraction (check all that apply):

- the two large straight molecules
- the large curved and circular molecules

15. Propane boils at -42°C, butane at 0°C, and pentane at 36°C. They are all straight molecules. Which one is the biggest?

- pentane

16. Small molecules did not attract well. However, only some of the large ones had a strong attraction. Describe how both size and shape play a role in the strength of the London Dispersion attraction.

it also depends on how many of the molecules are actually attracting each other and touching each other.

17. Snapshot with annotations indicating hydrogen bonds:

No Answer

18. While not possible, imagine that water molecules had no attraction for each other at all. Would you most likely find water as a solid, liquid, or gas? Explain your reasoning.

No Answer

19. Which pair of bases is held together more strongly: C and G, or A and T? How do you know?

No Answer